

Appl. No. 10/644,441
Amtd. Dated: August 18, 2005
Reply to Office action of March 30, 2005

REMARKS

Claims 1, 2, 4-7 and 9-23 are pending in this application. By this Amendment, claims 1, 4, 9, 10, 11 and 14 are amended. Favorable reconsideration is respectfully requested in light of the following Remarks.

Entry of this Amendment is proper under 37 CFR §1.116 because this Amendment: (a) places the application in condition for allowance (for the reasons discussed herein); (b) does not raise any new issue requiring further search and/or consideration because the amendments amplify issues previously discussed throughout prosecution; (c) does not add claims without deleting a corresponding number of claims; and (d) places the application in better form for appeal, should an appeal be necessary. This Amendment is necessary and was not earlier presented because it is made in response to arguments raised in the final rejection. Entry of this Amendment is thus respectfully requested.

I. Claim Objections

Claims 9-11 were objected to for various informalities. Applicant has amended claims 9-11 to correct the various informalities and respectfully requests withdrawal of the objection.

II. Claim Rejections Under 35 U.S.C. §112

A. First Paragraph

Claims 1, 2, 4-7, 9-14 and 20-23 were rejected under §112, First Paragraph, as failing to comply with the written description requirement. Particularly, the Office Action states that Applicant has not shown where the limitation "a tubular support member having a generally uniform outer diameter" is supported in the application as filed.

According to MPEP 2163, the written description requirement of §112 ensures that the scope of the invention recited in the claims does not exceed the scope of the invention known to the inventor at the time the original application was filed. *Vas-Cath Inc. v. Mahurkar*, 935 F2d 1555 (Fed. Cir. 1991). The test is whether one of ordinary skill in the art would clearly recognize upon reading the disclosure that, at the time of filing, the inventor possessed, or

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invented, what is claimed. *In re Gosteli*, 872 F.2d 1008, 1012 (Fed. Cir. 1989). While there is no *in haec verba* requirement, newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure. Indeed, “an invention claimed need not be described *ipsis verbis* in the specification in order to satisfy the disclosure requirements.” *Ex parte Eggleston* (B.P.A.I. 2005).

In the present application, Applicant has amended independent claims 1, 9 and 14 to include a tubular support member having a generally uniform outer diameter along its entire length. This claim limitation is expressly supported by paragraphs [0006], [0007], [0023] of Applicant’s specification, particularly when read in light of the application drawings. Specifically, paragraphs [0006] and [0007] describe the support member 30 as being tubular or cylindrical. Paragraph [0023] further describes support member 30 as “a hollow tube having an inner surface 32 defined by an inside diameter and an outer surface 34 defined by an outside diameter.” (Emphasis added). Figures 2 and 3 support this description by illustrating support member 30 as a tube having an outer diameter, which by virtue of there being only one diameter, is generally uniform along its entire length.

The subject claim limitation is also implicitly supported by paragraph [0030] of Applicant’s specification, which describes a method of producing a propeller shaft assembly. In the described method, a *non-flexible* support member 30 may be introduced into the tube 20 before or after the support member material is set up. The specification further states that:

“[I]t is desirable to ensure a close fit between the foam insert (support member 30) and the inner surface 22 of the tube 20. This can be accomplished by foaming the rigid foam insert to have an outer diameter slightly greater than or equal to the inner diameter of the tube 20. If the foam insert is greater in diameter than the tube 20, some deformation of the foam insert and/or tube 20 may occur during introduction of the support member 30 into tube 20.” (Emphasis added).

Since the above method of production contemplates making the *non-flexible* support member 30 before it is inserted into the tube 20, it is improbable that the specification’s description of the support member 30 as having an outer diameter would mean anything other than having a generally uniform outer diameter along its entire length due to the nature of such a manufacture. As will be appreciated, it would not be feasible to make a *non-flexible* support

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member with a varying diameter and then insert the varying diameter support member into tapered-end propeller shaft, such as the shafts disclosed in Hill and Schuermann. Indeed, this is the very reason the support member is injected as a fluid into the tapered-end Hill and Schuermann shafts. Accordingly, the original description, albeit in different language than is now claimed, conveys to the artisan that the Applicant had possession of the subject matter which they now claim, and the rejection under §112, First Paragraph, should be withdrawn.

B. Second Paragraph

Claims 4, 6, 7 & 20-22 were rejected under §112, Second Paragraph, as being indefinite. Applicant has amended claim 4 to provide sufficient antecedent basis for the claim limitations recited therein. Regarding claims 6, 7 and 20-22, Applicant respectfully submits that antecedent basis for the term "tubular member" may be found in line 2 of independent claim 1, which is distinguished from the recitation in line 5 of a "tubular support member." Accordingly, the rejection under §112, Second Paragraph, should be withdrawn.

III. Claim Rejections Under 35 U.S.C. §102

Claims 1, 6, 7, 9, 10, 14, 22 and 23 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,254,488 to Hill. However, nowhere does Hill disclose a propeller shaft assembly that includes a tubular support member having a generally uniform outer diameter along its entire length, as recited in amended independent claims 1, 9 and 14 and contained in dependent claims 6, 7, 10, 22 and 23 by virtue of their dependency from claims 1, 9 and 14. Instead, Hill discloses a hydroformed driveshaft 10 that includes inner and outer tubes 12 and 14 having tapered end portions that exhibit a diameter less than a central cylindrical portion 24 and 26, and a dampening material 30 having the same varying-diameter profile injected therebetween. For at least this reason, the §102(b) rejection is unsupported by Hill and should be withdrawn.

Claims 1, 6, 7, 9, 10, 14, 22 and 23 were rejected under 35 U.S.C. §102(b) as being anticipated by EP 0 471 240 to Schuermann et al. However, like Hill, nowhere does Schuermann disclose a propeller shaft assembly that includes a tubular support member having a

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generally uniform outer diameter along its entire length, as recited in amended independent claims 1, 9 and 14 and contained in dependent claims 6, 7, 10, 22 and 23 by virtue of their dependency on claims 1, 9 and 14. Instead, Schuermann discloses a driveshaft 1 having a core 5 with a non-uniform (parabolic) outer diameter. For at least this reason, the §102(b) rejection is unsupported by Schuermann and should be withdrawn.

IV. Claim Rejections Under 35 U.S.C. §103

Claim 2, 5, 12, 13, 20 and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schuermann or Hill. For at least the reasons noted above with respect to the rejections under §102(b), Schuermann and Hill fail to teach, suggest or disclose a propeller shaft assembly that includes a tubular support member having a generally uniform outer diameter along its entire length. Since the Office Action fails to set forth a *prima facie* case of obviousness, Applicant respectfully requests that the §103(a) rejection be withdrawn.

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CONCLUSION

In view of the above amendments and remarks, each of the presently pending claims in the application is believed to be in immediate condition for allowance. Accordingly, it is respectfully requested that this application be passed to issue.

Applicant believes all fees due with this response have been submitted in the attached petition. However, if any other fees are due, please charge our Deposit Account No. 07-1360, under Order No. G00352/US from which the undersigned is authorized to draw.

Respectfully submitted,

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